

What is claimed is:

1. A rotation angle detector comprising:

a rotor;

first and second detecting elements which rotate according to a

5 rotation of said rotor;

first and second detecting units for detecting rotations of said first and second detecting elements, respectively; and

10 a control unit for detecting a rotation angle of said rotor based on a first signal when a difference between said first and second signals output from said first and second detecting units ranges within a predetermined range.

2. The rotation angle detector of claim 1, further comprising:

15 a third detecting element which rotates according to the rotation

of said rotor; and

a third detecting unit for detecting a rotation of said third detecting element,

20 wherein said control unit detects said rotation angle of said rotor based on said first signal and a third signal output from said third detecting unit.

3. The rotation angle detector of claim 1, further comprising:

25 a third detecting element which moves according to the rotation of said rotor; and

a third detecting unit for detecting a movement of said third detecting element,

wherein said control unit detects said rotation angle of said rotor

based on said first signal and a third signal output from said third detecting unit.

4. The rotation angle detector of claim 1, wherein said first detecting unit includes a first magnet and a first magnetic sensor which detects a magnetic field from said first magnet.

5. The rotation angle detector of claim 4, wherein said second detecting unit includes a second magnet and a second magnetic sensor which detects a 10 magnetic field from said second magnet.

6. The rotation angle detector of claim 4, wherein said second detecting unit includes a second magnet and a Hall element which detects a magnetic field of said second magnet.